



ENTERED

OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/099,926

DATE: 04/04/2002 P-5  
TIME: 14:17:15

Input Set : D:\547c2.app

Output Set: N:\CRF3\04042002\J099926.raw

4 <110> APPLICANT: King, Gordon E.  
 5 Meagher, Madeleine Joy  
 6 Xu, Jiangchun  
 7 Secrist, Heather  
 8 Jiang, Yuqiu  
 12 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY  
 13 AND DIAGNOSIS OF COLON CANCER  
 16 <130> FILE REFERENCE: 210121.547C2  
 C--> 18 <140> CURRENT APPLICATION NUMBER: US/10/099,926  
 C--> 19 <141> CURRENT FILING DATE: 2002-03-17  
 22 <160> NUMBER OF SEQ ID NOS: 1982  
 24 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 26 <210> SEQ ID NO: 1  
 27 <211> LENGTH: 656  
 28 <212> TYPE: DNA  
 29 <213> ORGANISM: Homo sapiens  
 31 <220> FEATURE:  
 32 <221> NAME/KEY: misc\_feature  
 33 <222> LOCATION: 544, 560, 627, 635  
 34 <223> OTHER INFORMATION: n = A,T,C or G  
 36 <400> SEQUENCE: 1  
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 38 ggggtaggac acactttcgg gctctgcagg gaggccagaa gtattcttcc ctccatcaat 120  
 39 agctttcttg ttggaaagga gggaatcett tatttcagag tcaataacaa tcttaaggac 180  
 40 atctggctca gaggtggtt ctgcaagttg tttttcattc tcagaaaagt catcgtcttc 240  
 41 caagtgcagg aggaggggac tgatagagtc actctcccct tgaacatcag gcaactcttt 300  
 42 caaaccagtt cccaagtgt caacctggaa agttgctctg cttccaggag gaaccttact 360  
 43 aataaaaagcc cgccgagcat cccctgggaa ctctgtatcc atagagctgg gtagttcagc 420  
 44 caggccaaca gagtcatcat ttagttgttg attaagaaag gcaatttcat tgagcagtga 480  
 45 agtcagtgtc tcatcagtat catctcatc ttccatgtta ggtcagcagt tcaactggaat 540  
 W--> 46 caanactgct tctctatan ctgatgttac tttcctcagt tccatctcta tgctttgaag 600  
 W--> 47 cccttgaaaa ctttcatctt ttatttntga aaaangaaga atcctttgaa tttcac 656  
 49 <210> SEQ ID NO: 2  
 50 <211> LENGTH: 373  
 51 <212> TYPE: DNA  
 52 <213> ORGANISM: Homo sapiens  
 54 <400> SEQUENCE: 2  
 55 ctgtcccatg gggtccttat tgtaatctag accatcttgt tctagatggg cacttaagcc 60  
 56 ctgtttcttc atagtctgtt atgctgtcat ttggacctgg atgcttctctg tttcttccag 120  
 57 caatttttgt ttgtgttttt tgttgttgaa gagaggaaca ttaaggagt tagataaact 180  
 58 ggtaattttc agatgtgtag aaaattgcat aggtggtgaa agccaatgcc ataggctctg 240  
 59 aaattttact atttctaca tcaggaaatg tgtaccaaaa gtgctaaaaat gccagaata 300  
 60 attttgagta tctaaagata gataaatctt tcatctgtag tggaaatggc attatgactt 360

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Input Set : D:\547c2.app

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61 tatattctca tgg
63 <210> SEQ ID NO: 3
64 <211> LENGTH: 642
65 <212> TYPE: DNA
66 <213> ORGANISM: Homo sapiens
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69 <221> NAME/KEY: misc_feature
70 <222> LOCATION: 541, 598, 621, 639
71 <223> OTHER INFORMATION: n = A,T,C or G
73 <400> SEQUENCE: 3
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75 ggtgaggcaa aggcattctg acttggtcca gccagccca ccgggtgaca tcaccgggca 120
76 gggaggggtg ctgggtgttg ttcatatcga gtaagctgct ctgcctgtgt gagggtctcc 180
77 tgggccctaa acaggcacct ttaggccatg ggtcactcac cgtgagccat caatgtgtct 240
78 tgggtctgaca tgggttctct ctgtcttcta gtctagacct agtttttttg ttctgttccc 300
79 cacgtatgga tatagtagag attgtgtgtc gtgaaatttc tctttttag attttgagtt 360
80 ttcccttgta gtgtaaagaa tgatcacttt ctgtaacaat aacaagacca ctttttaaga 420
81 ttatctctgt ttgttctttg ttgattgaaa cataataatt gttaaaattc tctacagcct 480
82 tctttttctt ccatagctaa tcttcttctt aatagttttt gctttctgtt ttgctgttgt 540
W--> 83 ncttttgcaa agctttcccc tcatagcctg tacctgttat caatataaaa ataactctncc 600
W--> 84 tgtgggaatg cttcattgac ntgaatttct cctttggana aa 642
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87 <211> LENGTH: 575
88 <212> TYPE: DNA
89 <213> ORGANISM: Homo sapiens
91 <220> FEATURE:
92 <221> NAME/KEY: misc_feature
93 <222> LOCATION: 492
94 <223> OTHER INFORMATION: n = A,T,C or G
96 <400> SEQUENCE: 4
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98 tattacttga tgtcctaaag cttctttgag atttgctata aaatttccta tgatggtaga 120
99 acgcaaagt ccaacatgaa attttttggc aacattaggt gaactgaatt caaccacaat 180
100 cttcttctgg ggaagtccag agaaaagtgc actttttaat ccatattttg agccatcttc 240
101 aattacttgt ttagcactg tctttgttaa gagctctctg tttattttga aatttacagt 300
102 ctttgacca gtactgattt cactcaccac tgtatcacat cttagcttct ctgctagtct 360
103 cttggcttga acttgaatat ctggcttga atggctattg tctttttcca ataaagaatc 420
104 cacagaaagc tgaaaatcag ctacttcttc tttttgggaa attggaactg cagatattga 480
W--> 105 tgtgatcaag tnttctgggtg gaagattcaa cactctggaa agctgggaag caatagcgcg 540
106 gcgaaagccg cagccatgt ccacctctac gggaa 575
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109 <211> LENGTH: 558
110 <212> TYPE: DNA
111 <213> ORGANISM: Homo sapiens
113 <400> SEQUENCE: 5
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115 aaagtttgcc tatctggggc gcctggctca cgagggtggc tggaagtacc aggcagtgc 120
116 agccaccctg gaggagaaga ggaaagagaa agccaagatc cactaccgga agaagaaca 180
117 gctcatgagg ctacggaaac aggccgagaa gaacgtggag aagaaaattg acaatacac 240

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118 agaggctctc aagacccacg gactcctggt ctgagcccaa taaagactgt taattcctca 300
119 tgcgttgccct gcccttctc cattgttgcc ctggaatgta cgggacccag gggcagcagc 360
120 agtccagggtg ccacaggcag ccctgggaca taggaagctt gggagcaagg aaagggctct 420
121 agtcactgcc tcccgaagtt gcttgaaagc actcggagaa ttgtgcaggt gtcatttatc 480
122 tatgacaaa taggaaagag caaccagtta ctatgagtga aagggagcca gaagactgat 540
123 tgggagggcc ctatcttg                                     558
125 <210> SEQ ID NO: 6
126 <211> LENGTH: 451
127 <212> TYPE: DNA
128 <213> ORGANISM: Homo sapiens
130 <220> FEATURE:
131 <221> NAME/KEY: misc_feature
132 <222> LOCATION: 24, 301, 306, 375, 430
133 <223> OTHER INFORMATION: n = A,T,C or G
135 <400> SEQUENCE: 6
W--> 136 cctggcaggg aatgcaattc tcanagaaga caaagacccg caaaagatgt atgccaccat 60
137 ctatgagctg aaagaagaca agagctacaa tgtcacctcc gtctgttta ggaaaaagaa 120
138 gtgtgactac tggatcagga ctttgttcc aggttgccag cccggcgagt tcacgctggg 180
139 caacattaag agttaccctg gattaacgag ttacctcgtc cgagtgggtga gcaccaacta 240
140 caaccagcat gctatggtgt tcttcaagaa agtttctcaa aacagggagt cttcaagatc 300
W--> 141 nccctntacg ggagaaccaa ggagctgact tcggaactaa aggagaactt catccgcttc 360
W--> 142 tccaaatata tgggnctccc tgaaaaccac atcgtcttcc ctgtcccaat cgaccagtgt 420
W--> 143 atcgaccggn tgagtgcaca ggtgccggca g                                     451
145 <210> SEQ ID NO: 7
146 <211> LENGTH: 555
147 <212> TYPE: DNA
148 <213> ORGANISM: Homo sapiens
150 <220> FEATURE:
151 <221> NAME/KEY: misc_feature
152 <222> LOCATION: 293, 469
153 <223> OTHER INFORMATION: n = A,T,C or G
155 <400> SEQUENCE: 7
156 gcatatttaa tgcacacatt tgaatgttac acataataa ttttaacgat ggagtccaag 60
157 ttctggattt tacattagat ctgcatatat aagacacttg tggtaaatt tcaagattgg 120
158 taaagccagt ttcaagctgc ttatatattt agtacagggt tcaactattac aaatgtatga 180
159 tgtaaacta acaaaactcat gacctcaaaa gatgtcttcg tcccacgcac acacatttgt 240
W--> 160 aatttgtgtc catttgctat ttcccttctt ctataatctt caaattatat agntatgcat 300
161 tgagttccct atgcatctca cccatctcct ttatctcagc cttctcatac tttgccattc 360
162 tcttcttctt ggaaataacc agcacaacaa ttccagcaac aactgctatc accacaacca 420
W--> 163 caataacagg caataacacc agcttttaga ccctgcattg agaattcang tgctttttca 480
164 tcaacataat aaattaaagt ttgaccagga tccagatcca gttgttcccc atttactgtc 540
165 aggtccattt tctta                                     555
167 <210> SEQ ID NO: 8
168 <211> LENGTH: 277
169 <212> TYPE: DNA
170 <213> ORGANISM: Homo sapiens
172 <220> FEATURE:
173 <221> NAME/KEY: misc_feature
174 <222> LOCATION: 51, 76, 96, 118, 124, 163, 172

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175 &lt;223&gt; OTHER INFORMATION: n = A,T,C or G

177 &lt;400&gt; SEQUENCE: 8

W--> 178 gtggagcagc tcctgtacga aagccctgag cgggtactccc gctcagtgt nctcatcacc 60  
 W--> 179 cagcacctca gcctgntgga gcaggctgac cacatnctct ttctggaagg aggcgctntc 120  
 W--> 180 cggnaagggg gaaccaccca gcagctcatg gaaaaaaagg ggngctactg gnccatgggtg 180  
 181 caggctcctg cagatgctcc aaaatgaaa ccttctcaga cctgcgcact ccattctcct 240  
 182 cctttttctt ctctctgtgg tggagaacca cagagta 277

184 &lt;210&gt; SEQ ID NO: 9

185 &lt;211&gt; LENGTH: 474

186 &lt;212&gt; TYPE: DNA

187 &lt;213&gt; ORGANISM: Homo sapiens

189 &lt;220&gt; FEATURE:

190 &lt;221&gt; NAME/KEY: misc\_feature

191 &lt;222&gt; LOCATION: 431, 446, 464

192 &lt;223&gt; OTHER INFORMATION: n = A,T,C or G

194 &lt;400&gt; SEQUENCE: 9

195 cctgcatgga ttccatgttc atgagtttgg agataatata gcaggctgta ccagtgcagg 60  
 196 tcctcacttt aatcctctat ccagaaaaca cgggtgggcca aaggatgaag agaggcatgt 120  
 197 tggagacttg ggcaatgtga ctgctgacaa agatggtgtg gccgatgtgt ctattgaaga 180  
 198 ttctgtgata tcaactctcag gagaccattg catcattggc cgcacactgg tgggccatga 240  
 199 aaaagcagat gacttgggca aaggtggaaa tgaagaaagt acaaagacag gaaacgctgg 300  
 200 aagtcgtttg gcttgtggtg taattgggat cgcaccaata aacattccct tggatgtagt 360  
 201 ctgaggcccc ttaactcatc tgttatcctg ctagctgtag aaatgtatcc tgataaacat 420  
 W--> 202 taaacacttg naatcttaaa agtgggnattg tgtgactttt tcanaagttg cttt 474

204 &lt;210&gt; SEQ ID NO: 10

205 &lt;211&gt; LENGTH: 513

206 &lt;212&gt; TYPE: DNA

207 &lt;213&gt; ORGANISM: Homo sapiens

209 &lt;220&gt; FEATURE:

210 &lt;221&gt; NAME/KEY: misc\_feature

211 &lt;222&gt; LOCATION: 499

212 &lt;223&gt; OTHER INFORMATION: n = A,T,C or G

214 &lt;400&gt; SEQUENCE: 10

215 cctataccat tcaaggacag tatgccattc cacagccaga tttgaccaag ctgcaccagt 60  
 216 tggcaatgca acagtctcat ttcccatga cgcattggcaa caccggattc agtggcattg 120  
 217 aatccagctc tccagagggtg aaaggctatt gggcagggtt ggatgcattc gctcagacta 180  
 218 cttctcatga actcaccatt ccaaacgatt tgattggctg cataatcggg cgtcaaggcg 240  
 219 ccaaaatcaa tgagatccgt cagatgtctg gggcgcagat caaaattgcg aaccagtggt 300  
 220 aaggatctac tgataggcag gttaccatca ctggatctgc tgccagcatt agcctggctc 360  
 221 aatatctaata caatgtcagg ctttctctcg agacgggtgg catggggagc agctagaaca 420  
 222 atgcagattc atccataatc cctttctgct gttcaccacc acccatggat ccattctgtgt 480  
 W--> 223 aagtttctga acagtcagnc gattccaggt ttt 513

225 &lt;210&gt; SEQ ID NO: 11

226 &lt;211&gt; LENGTH: 606

227 &lt;212&gt; TYPE: DNA

228 &lt;213&gt; ORGANISM: Homo sapiens

230 &lt;220&gt; FEATURE:

231 &lt;221&gt; NAME/KEY: misc\_feature

232 &lt;222&gt; LOCATION: 365, 433, 507, 549, 591

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238 aaggggccaa gatcacaagg tcctgctgct acctgagggg tctgaagctt tgagggcagg 180
239 ggctggggag tcacaatcct gtgaggcagg gagaggggag agtcacaaac ccaactcagc 240
240 gctattcttt agccctaggc gctttcactc ctcagtcccc tagaagtcac cagtaggtgt 300
241 caactgggca gacaagggac aggaagacag ggatggccca gggcttttta ccgctttgtt 360
W--> 242 tttangcccg tttctccatt aagggatgca gaggcagggg tggagtgagt gaatgaatga 420
W--> 243 gtcacatctc canaacagca ggaagggaaca gcctctgctg gcaatgacag ttccccagat 480
W--> 244 gagatccctg gggctctgaa aggggaanggc aagattcccc cccccaatg ccccgggatt 540
W--> 245 agggggcana tctgaaggga attcacaag gggcagccac agggagtgtc ntaccttcgg 600
246 gccggc 606
248 <210> SEQ ID NO: 12
249 <211> LENGTH: 549
250 <212> TYPE: DNA
251 <213> ORGANISM: Homo sapiens
253 <220> FEATURE:
254 <221> NAME/KEY: misc_feature
255 <222> LOCATION: 34
256 <223> OTHER INFORMATION: n = A,T,C or G
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260 ccaagggagt gcaatttttc atcttccaat ggcggcctca accttgaggc gaatccactg 120
261 gcgaaagatg cctttctagg aagcagagct ccctgactgg gctaagatag ttcagattga 180
262 tcttaggtca atggttaagac ctatgtagtt catgaagtct tggcttttcg gcgctgggtc 240
263 gcccaaagca gaatggagac ggatagagtg gtggctccca gaatcccgaa gaacataagc 300
264 agtgagaacg agccctggcg catacacttg tatccatgga aaccatcagc acaaacacac 360
265 tgcaaaagac ctggaccatc aggtacacaa gatccattct caggacacat ttctgggttc 420
266 ccagtgttat tgcaaagggt cttttgccct tgacagattt ggttgtctat ataagaggtg 480
267 atagtattcc agcattaatt cctccaggac agttgacatg ttgtggcagt atcagagtct 540
268 ggagctgag 549
270 <210> SEQ ID NO: 13
271 <211> LENGTH: 723
272 <212> TYPE: DNA
273 <213> ORGANISM: Homo sapiens
275 <220> FEATURE:
276 <221> NAME/KEY: misc_feature
277 <222> LOCATION: 594, 603, 620, 665, 708
278 <223> OTHER INFORMATION: n = A,T,C or G
280 <400> SEQUENCE: 13
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282 aatcatgtta gagttacttc tataaagtga acagatttta ttaatcacgg cttttggtga 120
283 atttgtttaa ggttaattat ggtagcaaat tttgggccta aacattattt ttctgtatcc 180
284 cgctgtaatt cccaaaactc tcattattct ctaactatta cacatgggca tattctgatg 240
285 tttctcatcc tttgccagaa gactacctta catccatcgt aattgttctc taggaaaaga 300
286 gaactttttt caaaattcaa aatacttctt aaggatggca cagtaccata taactggagt 360
287 aataaaacat gagcttacat tcttacaata actaaaccac ttaaaatgat caaggcacta 420
288 atgttttggt ctgaaaagct gtgtacttta tagacatttt cagacatttt tggaaatttc 480

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Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/099,926

DATE: 04/04/2002

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Input Set : D:\547c2.app

Output Set: N:\CRF3\04042002\J099926.raw

L:18 M:270 C: Current Application Number differs, Wrong Format  
L:19 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:46 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:47 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:83 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:178 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:179 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:180 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10  
L:242 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11  
L:243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11  
L:244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11  
L:245 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11  
L:259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:290 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:291 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:292 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15  
L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:383 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:404 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
L:456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22  
L:480 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:495 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:522 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:537 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26  
L:546 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26  
L:547 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26  
L:548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26  
L:571 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
L:594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28  
L:629 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30  
L:630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30  
L:667 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:670 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:683 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
L:727 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35

VERIFICATION SUMMARY

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Input Set : D:\547c2.app

Output Set: N:\CRF3\04042002\J099926.raw

L:728 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
L:729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
L:748 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36  
L:749 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36